

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0050] with the following amended paragraph:

[0050] The signal PD-Power is received in optical output controller 350 of optical transmission controller 110 at trans-impedance amplifier (TIA) 612, where it is converted to a voltage signal. The output signal from TIA 612 is input to variable gain amplifier 614. The output signal from variable gain amplifier 614 is input to ADC 616. The output signal from ADC 616 is input to adder 618, where it is compared with an output signal from power settings 620. Power settings 620 provides a voltage signal in response to a settable power parameter. The power parameter may be input to optical transmission controller 110 through interface 372 or stored as an operating parameter in memory 430. The error signal output from adder 618 is input to PID 610, which generates a new attenuation signal. The new attenuation signal is input to DAC 608. The analog signal from DAC 608 is input to VOA driver 606, which provides a VOA signal to control variable optical attenuator (VOA) 314 of modulation block 103.

Please replace paragraph [0057] with the following amended paragraph:

[0057] Similarly, the output signal from filter 594 is input to ADC 592, where the sampling operation is synchronized with the phase of the dither signal generated by dither generator 590. The digital signal from ADC 592 is then sent to demodulator 602. The output signal from demodulator 602 represents bias drift amplitude and direction and is input to PID 600, which generates a new DC bias signal. The DC bias signal is input to DAC 598 and the analog signal from DAC 598 is then input to bias drive ~~566~~ 596.